

ABSTRACT

A control for defining data for setting the times for controlled events in a glass forming machine which is controlled by a programmable sequencer which defines the time of a machine cycle. The control includes a computerized model of a mathematical representation of a network constraint diagram of the unwrapped bottle forming process and a computer for analyzing the computerized model as a constrained optimization problem for determining, with the following data inputs:

1. the motion durations,
2. the submotion durations,
3. the machine cycle time,
4. the event time in an unwrapped bottle forming process for each displacement to begin and for each valve to be turned "on" and "off", and
5. thermal forming process duration "N".

define the fastest machine cycle time for a feasible schedule and the event time in the unwrapped bottle forming process for each displacement to begin and for each valve to be turned "on" and "off".